

## ACADEMY

Newsletter

DEDICATED  
TO SCIENTIFIC  
RESEARCH AND  
EDUCATION,  
INSPIRING  
RESPECT FOR  
THE NATURAL  
WORLD

## A SOCIETY OF WOLVES

APRIL 13, 2 AND 7:30 PM, WITH RICK MCINTYRE



Rick McIntyre

Before the discovery of America, 2 million wolves inhabited the contiguous United States. By the 1950s, only a few hundred remained. Wolves were shot, trapped and poisoned to near extinction as a matter of government policy.

Rick McIntyre has spent many years observing wild wolves in Alaska and Montana and two years studying a captive wolf pack. He'll discuss wolf/prey relations, the social behavior of packs, pup rearing, and wolf/human interactions. After surveying attitudes toward

wolves throughout recorded history, McIntyre will explain the reasons behind efforts to exterminate wolves in Europe and the United States.

He also will discuss why the National Park Service killed all of the wolves in Yellowstone and Glacier national parks and the controversial issue of reintroducing wolves to Yellowstone and areas in the Southwest and Northeast.

The author of *A Society of Wolves: National Parks and the Battle Over the Wolf*, McIntyre has worked as a park ranger for 32 seasons. His other books include *Denali National Park: An Island in Time* and *Grizzly Cub: Five Years in the Life of a Bear*, with many of his wildlife photographs appearing in numerous nature magazines.

A book-signing will follow the program. Please present your membership card at the Academy entrance and again at the auditorium. This members meeting is provided as a benefit of membership and thus is open only to Academy members.

MEMBERS



MEETING

## Special Members Meeting

## Gene Roddenberry – Himself

April 19, 7 pm, with Yvonne Fern

There are very few people who don't recognize Mr. Spock's pointy ears or the expression "beam me up." Ever since the beginning in 1966, the Star Trek series has projected the wonders of intergalactic travel in the twenty-third century.

Yvonne Fern is the author of the authorized philosophical biography of Gene Roddenberry, the creator of Star Trek. Fern's upcoming book *Gene Roddenberry: The Last Conversation* (to be released in August, 1994) talks about Roddenberry — who he was in comparison to what everyone thought.

Today, many people are writing books about Star Trek. But Fern says, "there are only two authorized ones - mine and a biography. The biographer talks to many people in Gene's life. My book is Gene, I talked only to him and he to me."

## Star Trek Members Evenings

On Apr. 18 and 19 the Star Trek exhibit (and all of the Academy) will be open to members, 6–9 pm. Additionally, on the 18th, there will be two seatings for the Morrison Planetarium show "Orion Rendezvous: A Star Trek Voyage of Discovery" at 7 and 8 pm. There will be no sky show presentation on the 19th, only the Yvonne Fern lecture at 7 pm in the auditorium.

Conversations at  
the Herbst Theatre

**W.S. Merwin, Apr. 20** — Merwin is a major American writer whose poetry and prose have the recurring theme of people's separation from nature. *The Lost Upland*; *The Rain in the Trees*; and *Unframed Originals*. A reading/conversation.

**Jim Harrison & Terry Tempest Williams, Apr. 27** — Harrison's writing explores his vision of the individual soul struggling for a more abundant life. *Legends of the Fall*; *Julip*; and *Sundog*. Williams has emerged as one of the most powerful and unique writers of the West. *Refuge*; *Pieces of White Shell*; and *Unspoken Hunger*. Literature and landscape conversation with Keay Davidson, science writer, San Francisco Examiner.

**Andy Goldsworthy, May 3** — A British sculptor and photographer, Goldsworthy's art comes directly from his excursions into nature. *A Collaboration with Nature*; *Touching North*, and *Hand to Earth*. A conversation.

All programs at 8 pm at the Herbst Theatre; \$12 members/\$14 nonmembers. For information, call 392-4400.



## A Terrible Swift Sword

### Comet Shoemaker-Levy 9's Collision Course with Jupiter

Comet Shoemaker-Levy 9 has been described as "a string of pearls" since its nucleus has broken up into at least 17 fragments. Historically, comets have been described as "flaming swords" in the sky, and this particular "sword" is poised to strike the planet Jupiter in July.

In this lecture, David Levy, a noted comet discoverer and author of popular astronomy books, will describe his search for comets, and in particular the discovery of Comet Shoemaker-Levy 9. He also will discuss the potential affect of the comet on Jupiter's atmosphere and speculate on the affect such an impact might have on Earth.

This lecture is co-sponsored by The Planetary Society.

Apr. 19, 9 pm (7:30 pm sold out)  
Tickets: \$2 each

Exploring the Universe Series – use coupon for advance tickets (first-come, first-serve at the door). For information about other programs in this series, call 750-7141.

## Current Sky Shows

"Orion Rendezvous: A STAR TREK Voyage of Discovery," 2 pm weekdays, and 12, 2 and 4 pm weekends; "Galileo's Universe," weekends at 1 and 3 pm; and "Touch the Stars," weekends at 11 am. For more information, call 750-7141.

## YOUNG AUDIENCES

### The Treasure Tree

Drawing on their extensive background in experimental theater, teaching and science, Tell Tale Puppet Theater presents "The Treasure Tree," an environmental puppet fable that explores the phenomenon of symbiosis. Life-size puppets, storytelling and live music combine to emphasize the interdependence of nature's organisms. — Apr. 24

This family series is presented in the auditorium at 1 pm. Free after general admission. Call 863-1719 for more information.

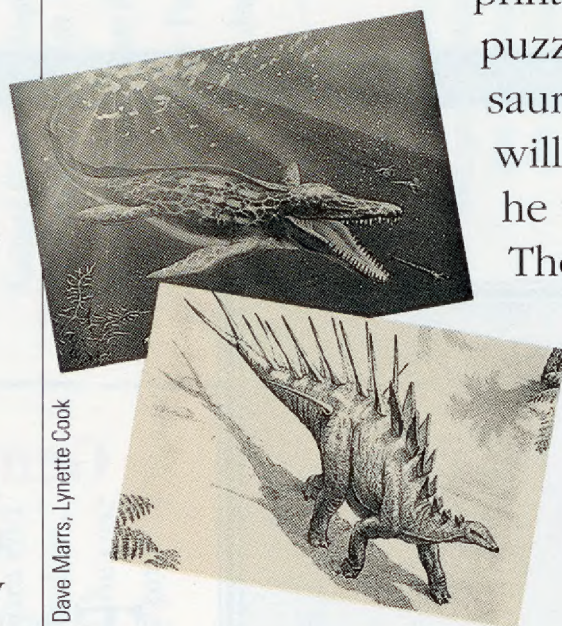
## Kids, Dinosaurs to Leave Footprints

Dinosaurs will emerge from their prehistoric haunts to join children for an action-packed dinosaur adventure on Saturday, Apr. 30, from 10 am to 1 pm. The "Dino Trade-A-Thon" will combine arts and crafts activities, dinosaur lore and facts, and an opportunity to swap realistic and educational dinosaur trading cards.

Young hobbyists will pursue their favorite dinosaurs during a trading spree that will include monitored activities. They also will test their artistic skills through a range of fun activities, including coloring a *Dilophosaurus* or a *Parasaurolophus*; creating a dinosaur footprint; solving the clues in a dinosaur crossword puzzle; and finding the answers to tricky dinosaur math questions. Local artist, Dave Marrs, will explain how dinosaurs are reconstructed as he works on one of his dinosaur paintings.

The first 500 kids at the event will receive a free 10-pack of Dinocardz™ trading cards to trade with their friends here at the Academy. Participants who complete the trading activities will take home a prize.

Co-sponsored by the Dinocardz Co., which specializes in high-quality, scientifically accurate dinosaur images and information.



Dave Marrs, Lynette Cook

## Chiapas, Mexico Honors Breedlove

Dr. Dennis Breedlove, Academy curator of botany, first visited Chiapas, Mexico in 1964 as a graduate student at Stanford studying ethnobotany. This was the beginning of a lifelong pursuit of research, exploration and documentation of the rich botanical habitat that thrives throughout Mexico's southern-most state. His dedicated work has produced the identification of more than 10,000 rare species, 500 of which were unrecognized prior to his work, and a collection of 80,000 specimens. Throughout his endeavors he has cooperated with the Mayan people and Mexican biologists, sharing his discoveries and collections with both groups.

Breedlove initiated the pioneering collaboration with the *Tzeltal* and *Tzotzil* peoples of Chiapas, cataloging the names and uses of 11,000 plant specimens in their native language. In 1988, Breedlove shared his documentation of old growth and new growth forests with local biologists who previously had very little record of such information. This cooperative effort eventually led to the creation of nature reserves of virgin forests throughout Chiapas.



The governor of Chiapas recently recognized Breedlove's work with the presentation of the distinguished award, *Premio Chiapas*, for studies in the natural sciences. This marks the first time an American has received the award, which is regarded in Mexico with as much prestige as the Noble Prize. The foundation of knowledge Breedlove has established will undoubtedly prove invaluable to biologists and conservationists in the future.

## TRADITIONAL ARTS

### Ragtime Music

The American Ragtime Ensemble plays the popular music of the Ragtime Era (1890-1920) in the original orchestrations, including pieces by Scott Joplin. Auditorium — Apr. 2

### Egyptian Music

The talented quartet Jazayer performs classical, urban and folk music from Egypt on typical instruments – the *riqq* (tambourine), *tabla* (drum), *kaman* (violin), and *qanun* (75-stringed zither). Auditorium — Apr. 9

### Russian Icons

With the recent reopening of the churches in Russia, religious icons are once again admired and appreciated, and the skills of icon artists once more in demand. Andrey Anisimov displays a selection of his sacred figures and scenes painted on wood panels and demonstrates the techniques employed. African Hall — Apr. 16

### Palestinian Wedding Songs and Dances

Members of Westwind Folk Ensemble present their ethnographic interpretation of the marriage rituals, customs, songs, dance and instrumental music associated with a traditional Palestinian wedding celebration. Costumes and jewelry by Salwa Nashashibi. Auditorium — Apr. 23



© Harry Wade 1994

### Gold Panning

Prospector Dennis Manyak demonstrates the gold-panning skills he uses on his forays to the foothills. Visitors can then practice panning for authentic placer gold in large outdoor troughs. You keep all the gold you find! Central Courtyard — Apr. 30

Explore cultural traditions from around the world, Saturdays, 1-2 pm. Free after general admission. Call 750-7163, for information.

## ACADEMY TRAVEL

### Images of Indonesia

September 7-21, with Dr. Jim Kelley

The adventure of a lifetime awaits halfway around the world in this exotic archipelago nation. From elaborate temples to the ancient symbolism of ikat tapestries, from Komodo dragons to evocative dances that tell the history of these islands of fire – Indonesia is beyond imagination. Aboard the *Caledonia Star* you'll explore a number of Indonesia's idyllic islands. Extraordinary wildlife, remote anchorages, powder-white beaches and ancient cultures are all part of this fantastic landscape.

Cost: \$6,600-\$9,100 per person (based on double occupancy) including airfare from Los Angeles or New York. Airfare subject to change.



John Keman

### The Natural Wonders of Western Australia: Sydney, the Outback, Springtime Flowers

September 16-October 2, with Dr. Frank Almeda

Australia's 50 million years of utter isolation has led to the evolution of a bewildering array of plant and animal life that has little in common with life forms in relatively nearby parts of the world. You'll visit the beautiful, polycultural city of Sydney, and Western Australia with its stunning coastline and extraordinary flora. Perth, the tiny tropical village of Denham, Monkey Mia at Shark Bay (famed for the bottlenosed dolphins which swim inshore), and Australia's red monolith, Ayer's Rock, will all be on this exciting itinerary.

Cost: \$3,950 per person (based on double occupancy) plus air.

For detailed itineraries on these and other tours, please call the travel office at 750-7348.





# LECTURES

© Patricia D. Moehman NYZS/The Wildlife Conservation Society



## FRESH FROM THE FIELD — DR. DAVID WESTERN

A Series of Lectures by Internationally Recognized Field Research Scientists, Co-sponsored by The New York Zoological Society  
Dr. David Western, the Nairobi-based director for strategic planning for the NYZS/The Wildlife Conservation Society, is one of Africa's leading ecologists and conservationists, and an expert in the conservation of rhinos and elephants.

Largely through Western's efforts, the Kenyan government created Amboseli National Park in 1974, at the northern base of Mt. Kilimanjaro. His comprehensive park management plan balanced the needs of the local *Maasi* people with wildlife, in one of the first major examples of sustainable development conservation management.

Other lectures in this series include: Dr. Alan Rabinowitz, speaking about tigers, Jun. 29; Dr. Amy Vetter, lecturing on gorillas, Oct. 18; and Dr. William Karesh, discussing field veterinary role in conservation, Dec. 7. Series tickets are available for all four lectures (including Western) for \$20 members/\$28 nonmembers. Receptions will be held for each lecture in the series; \$30 members/\$35 nonmembers. May 18 — 7:30 pm; \$6 members/\$8 nonmembers — 6 pm reception; \$30 members/\$35 nonmembers

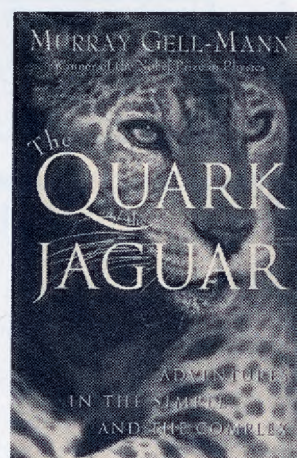
## THE QUARK AND THE JAGUAR

Winner of the 1969 Nobel Prize in physics for discovering the quark and known as a leading architect of the new science of complexity, Dr. Murray Gell-Mann is one of the world's most accomplished and influential scientists.

Beyond his wide-ranging intellectual pursuits, Gell-Mann has a lifelong passion for archaeology, history of language, natural history, and creative thinking. He brings all of these fields together in his book, *The Quark and the Jaguar*, which involves using theoretical science to study complex systems as diverse as the rain forest, stock market, computer, and the human mind.

Much more than just a primer on complexity, the book is Gell-Mann's personal story of finding the connections between the study of particle physics and his ongoing fascination with natural selection, species diversity, and other fields. He believes that in nature, the simple (a quark in its nucleus) and the complex (a jaguar prowling its jungle territory) are very closely linked. A book-signing will follow the lecture.

May 5, 7:30 pm — \$6 members/\$8 nonmembers



## THE INSIDE/OUTSIDE PASSAGE

Join Audrey Sutherland for this lecture about her 837-mile solo kayak trip through the inside passage from Skagway, Alaska to Thurlow Island, British Columbia in 1983. More recently, she made the return trip using the outside passage.

Traveling in an inflatable boat that she rolls up into a duffle bag, Sutherland has paddled over 7,000 miles during the last 14 summers in British Columbia and southeast Alaska.

Her infectious enthusiasm and humor will be evident as she connects history and hot springs, bears and whales, with haute cuisine tossed in. Author of two books, *Paddling My Own Canoe* and *Paddling Hawaii*, Sutherland will be available for a book-signing after the lecture.

Apr. 25, 7:30 pm — \$6 members/\$8 nonmembers

## OTHER APRIL LECTURES

Don't miss these lectures previously announced in the March newsletter. **Brown Bear/Human Interactions** — Apr. 6, with Johanna Fagen, for a behavioral analysis of bear and human interactions. **"N" is a Number: A Portrait of Paul Erdős** — Apr. 8 & 9, to premiere film maker George Csicsery's one-hour documentary on the world's most prolific mathematician (for times and ticketing information, call 552-8760). **Animal Play in Biological Perspective** — Apr. 12, with Dr. Robert Fagen, one of the foremost authorities on the subject of play in animals. **Sacred Peaks of East Africa** — Apr. 14, with Dr. Edwin Bernbaum, to explore the beliefs and religious practices of the area. Except where noted, all lectures begin at 7:30 pm.

Presented in the auditorium by experts in natural history. Use coupon for tickets. For information, call 750-7128.

## ADULT & FAMILY EDUCATION

### HEARST CASTLE with Gary L. Holloway

Hearst Castle is one of the most magnificent homes ever built in the world, designed by famed architect Julia Morgan.

En route to the castle, we'll stop at the remote Mission San Antonio de Padua at Jolon. Nearby is the Julia Morgan-designed Officer's Club for Fort Hunter Liggett, originally a Hearst Ranch dwelling.

On Saturday, we'll tour both swimming pools, two guest cottages, the major rooms on the ground and second floors (including William Randolph Hearst's private library and bedroom, known as the Celestial Suite).

Sunday includes a journey to historic San Juan Bautista for lunch at Cademartori's and a stroll through one of California's most beautiful mission villages. Participants must be able to climb more than 300 stairs.

Apr. 15-17 (9 am Fri.-4:30 pm Sun.); Cost: \$275 members/\$300 nonmembers (double); \$355 members/\$380 nonmembers (single); Includes accommodations at the Bluebird Motel, Sat. box lunch, lunch at Cademartori's, castle admission, and transportation.

Preregistration required. For more information on these and other offerings, call 750-7100.

### STEINHART DIRECTOR TO STUDY THREATENED FISH

Dr. John McCosker, director of the Academy's Steinhart Aquarium since 1973, has resigned his position to occupy the first endowed Chair of Aquatic Biology in the Academy's research division. Trained as a marine biologist, McCosker has studied the behavior of creatures as small as bioluminescent bacteria that live within flashlight fishes, to sharks as large as the great white.

In his new role as a senior scientist, he will research fish evolution and behavior, marine life of the Galapagos Islands, and the interaction of humans and predatory sharks. He will initiate a long-term program on the condition of fishes in the Central Valley, the Delta, and the Gulf of the Farallones.

During McCosker's leadership, the Aquarium added the Fish Roundabout, the Penguin Colony, and the Living Coral Reef. The Academy is deeply grateful for all of John's, and his wife, Pam's, contributions and looks forward to his continued achievements as a research scientist.



Robert Dume





THE ACADEMY STORE

VISIT THE BLACK ACHIEVERS IN SCIENCE EXHIBIT, ON DISPLAY THROUGH APRIL 17.

IN SEARCH OF IDENTITY—An exciting way to discover black heritage, this board game features prominent black athletes, scientists, musicians, and explorers. Ages 8–adult; \$26.95 (member's price).



THE BLACK EXPLORERS: A MATH ADVENTURE GAME—Follow the achievements of black explorers and learn stories of strength, courage and accomplishments by solving math problems. Ages 8–12; \$25.15 (member's price).

APRIL						
SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
CURRENT EXHIBITS: Black Achievers in Science, through Apr. 17 Star Trek®: Federation Science, through May 1 Hands on Science, through December Birds of a Feather, through June 1995						
3 MEMBERS Please bring your membership card when you visit the Academy	4 DOLPHIN FEEDINGS are at 10:30 am, and 12:30, 2:30 and 4:30 pm every day		6 Free Day First Wednesday of each month Brown Bear/Human Interactions (Lectures)	7 SPECIALTY TOURS Free one-hour tour at 1:30 pm: Tuesdays, Aquarium; Wednesdays, Life Through Time; Thursdays, Wild California	1 PENGUIN FEEDINGS are at 11:30 am and 4 pm every day	2 Ragtime Music (Traditional Arts) 
10 FISH ROUNDAABOUT closed for repairs until summer	11		13 A Society of Wolves; 2 & 7:30 pm (Members Meeting)	14 Sacred Peaks of East Africa (Lectures)	15 PLANETARIUM SKY SHOWS on weekends at 11 am, and at 12, 1, 2, 3 and 4 pm	9 "N" is a Number: A Portrait of Paul Erdős (Lectures) Egyptian Music (Traditional Arts)
17 "Best Hikes for Children in the Bay Area," with Bill McMillon, 2 pm (Author's Day)	18 Members viewing of Star Trek exhibit & planetarium show; 6–9 pm (Membership)	12 Animal Play in Biological Perspective (Lectures)	20 W.S. Merwin (Conversations at the Herbst Theatre)	21 PLANETARIUM SKY SHOWS on weekdays at 2 pm	22 LASERIUM SHOWS Thursday–Sunday, evenings, call 750-7138	16 Russian Icons (Traditional Arts)
24 The Treasure Tree (Young Audiences)	25 The Inside/Outside Passage (Lectures)	19 Gene Roddenberry – Himself; 7 pm (Special Members Meeting) Members viewing of Star Trek exhibit; 6–9 pm (Membership) A Terrible Swift Sword (Planetarium)	27 Jim Harrison & Terry Tempest Williams (Conversations at the Herbst Theatre)	28	29	23 Palestinian Wedding Songs and Dances (Traditional Arts)
						30 Dino Trade-A-Thon (Education) Gold Panning (Traditional Arts)

MAY DATES TO REMEMBER:

May 3, Andy Goldsworthy (Conversations at the Herbst Theatre)  
May 5, The Quark and the Jaguar (Lectures)  
May 17, Keck Telescope: The World's Largest Time Machine (Planetarium)  
May 18, Fresh from the Field — Dr. David Western (Lectures)

UPCOMING MEMBERS MEETINGS:

May 11, 40 Years of Everest, Norbu Tenzing Norgay  
June 8, Blue Whales Revisited, Tom Johnson  
July 13, The Oregon Trail, with Ron Cronin

COUPON FORM

California Academy of Sciences  
Golden Gate Park  
San Francisco, CA 94118  
Address Correction Requested

Non-Profit Organization  
U.S. Postage Paid  
Permit No. 7544  
San Francisco

LECTURES	Qty/Mem.	Qty/Nonmem.	Total
Brown Bear/Human Interactions / Apr. 6	x 6	x 8	=
"N" is a Number: A Portrait of Paul Erdős/Apr. 8 & 9 For tickets, call the Film Arts Foundation, 552-8760.			
Animal Play in Biological Perspective / Apr. 12	x 6	x 8	=
Sacred Peaks of East Africa / Apr. 14	x 6	x 8	=
The Inside/Outside Passage / Apr. 25	x 6	x 8	=
The Quark and the Jaguar / May 5	x 6	x 8	=
Fresh From the Field — Western / May 18	x 6	x 8	=
Lecture Reception only	x 6	x 8	=
Series (4 lectures, including Western)	x 30	x 35	=
Reception options:	x 20	x 28	=
May 18 reception	x 30	x 35	=
Jun. 29 reception	x 30	x 35	=
Oct. 18 reception	x 30	x 35	=
Dec. 7 reception	x 30	x 35	=
TOTAL \$			
MORRISON PLANETARIUM			
A Terrible Swift Sword / Apr. 19	Quantity x 2		Total =
First Light Science: Keck Telescope / May 17	x 2		=
Beyond the Womb of Earth / Jun. 7	x 2		=
TOTAL \$			
CONVERSATIONS AT THE HERBST THEATRE			
For tickets, please call City Box Office, 392-4400.			
TOTAL PAYMENT ENCLOSED		\$	

PAYMENT METHOD

(Check one) ☐ Check ☐ VISA ☐ MasterCard ☐ American Express

Card# \_\_\_\_\_ Exp. Date \_\_\_\_\_

Credit card charges gladly accepted over \$10.

Signature \_\_\_\_\_

MAKE CHECK PAYABLE TO: C.A.S. and mail with this coupon form to:  
Membership Office, Ticket Services  
California Academy of Sciences, Golden Gate Park, San Francisco, CA 94118  
Daytime Phone \_\_\_\_\_

Include a self-addressed, stamped envelope for each series for which you subscribe.  
No refunds/exchanges.



The Academy includes the Natural History Museum, Steinhart Aquarium and Morrison Planetarium. Open every day of the year from 10 am to 5 pm.

VISITOR SERVICES

Academy Information: 415-750-7145  
Academy Store: 750-7330  
Admissions: 750-7159  
Aquarium: 750-7247  
Biodiversity Center: 750-7361  
Development Office: 750-7216  
Docent Tours: 750-7155  
Education Office: 750-7100  
Group Information: 750-7043  
Job Hotline: 750-7333  
Laserium: 750-7138  
Lectures: 750-7128  
Library: 750-7102  
Membership Office: 750-7111  
Planetarium: 750-7141  
Planned Giving: 750-7216  
Security: 750-7000  
Switchboard: 221-5100  
Travel: 750-7348  
Volunteer Services: 750-7154  
Weekend Information: 750-7375

The Academy Newsletter is published monthly for Academy members.  
© 1994 California Academy of Sciences  
Editor / Sheri Ketchum  
Design / Nancy Campana Design  
Printing / Fruitridge Printing & Lithograph Inc.  
Printed on Recycled Paper with Soy-based Ink